CLAIMS:

1. A method of adaptation of a frame structure of time division multiplexed (TDM) channels into a group of complete ATM cells transmitted each TDM frame period, wherein each byte of the TDM frame structure is mapped to a corresponding byte of an identifiable cell of the group of cells.

2. A method of adapting synchronous time division multiplexed (TDM) traffic at an interface between a synchronous network in which the traffic is transported in frames identified by corresponding pointers and labels and an asynchronous network in which the adapted traffic is transported in cells, the method comprising mapping said synchronous frames into primary multiplexed groups, mapping each said primary multiplexed group into traffic cells in a respective asynchronous virtual channel, and providing that virtual circuit with a corresponding virtual channel indicator, and wherein said pointers and labels are mapped into one or more separate asynchronous cells for transport ahead of said traffic cells.

3. A method as claimed in claim 2, wherein said primary multiplexed groups are multiplexed by byte interleaving into a secondary multiplexed signal.

4. A method as claimed in claim 3, wherein said adaptation to ATM is performed using ATM adaptation layer zero (AAL0).

5. A method as claimed in claim 4, wherein a time slot group frame boundary coincides with the ATM cell boundary.

6. A method as claimed in claim 5, wherein each ATM cell containing time slots from a synchronous frame is given its own virtual circuit indicator, and wherein cells relating to that frame are allocated a common virtual

path indicator so that said cells can be transmitted and switched together.

7. An arrangement for adapting a frame structure of time division multiplexed channels into a group of ATM cells, which cells are transmitted in a time period corresponding to the frame period, wherein each byte of the frame structure is mapped to a corresponding byte of an identifiable cell of said group of cells.

8. An arrangement for adapting frame based time division multiplexed (TDM) traffic to asynchronous transfer mode transport, the arrangement comprising a first TDM card incorporating a multiplexer/mapper coupled via a set of framers to a first adaptation function, an ATM adaptation card incorporating a second ATM adaptation function coupled to one or more data transfer elements, and a single ATM backplane providing a coupling between said first and second adaptation functions.

9. An arrangement for adapting synchronous time division multiplexed (TDM) traffic at an interface between a synchronous network in which the traffic is transported in frames identified by corresponding pointers and labels and an asynchronous network in which the adapted traffic is transported in cells, the arrangement comprising mapping means for mapping said synchronous frames into primary multiplexed groups and for mapping each said primary multiplexed group into traffic cells in a respective asynchronous virtual channel, and means for providing that virtual circuit with a corresponding virtual channel indicator, and wherein said pointers and labels are mapped into one or more separate asynchronous cells for transport ahead of said traffic cells.

10. An arrangement as claimed in claim 7, and including means for multiplexing said primary multiplexed groups by byte interleaving into a secondary multiplexed signal.

11. An arrangement as claimed in claim 9, wherein each ATM cell containing time slots from a synchronous frame is given its own virtual circuit indicator, and wherein cells relating to that frame are allocated a common virtual path indicator so that said cells can be transmitted and switched together.

12. An arrangement as claimed in claim 11, and provided in the form of an integrated circuit.